IN THE CLAIMS:

1. (currently amended) A hybrid switch in a line, comprising:

a first switching module for switching voltages and switching currents and for incurring substantially all switching losses during the turn on transition from a current off state of said hybrid switch to a current on state and during the turn off transition from said on state to off state of said hybrid switch; and

a second switching module for conducting current between switching transitions and for incurring substantially all conduction losses,

said first and second switching modules being connected electrically in parallel, and said switching modules being respectively controllable to be in one of an open non-conducting off state and a closed conducting state, at least one said switching module having solid state construction; and further comprising

a control circuit for switching respectively said first module and said second module on and off, each module in a predetermined sequence and for predetermined intervals to reduce power losses in the conduction and switching operation of the hybrid switch.

2. (currently amended) A hybrid switch in a line, comprising:

a first switching module for switching voltages and switching currents and for incurring substantially all switching losses during the turn on transition from a current off state of said hybrid switch to a current on state and during the turn off transition from said on state to off state of said hybrid switch; and

a second switching module for conducting current between switching transitions and for incurring substantially all conduction losses,

said first and second switching modules being connected electrically in parallel, and said switching modules being respectively controllable to be in one of an open non-conducting off state and a closed conducting state, at least one said switching module having solid state construction, ~~The hybrid switch as in claim 1, wherein~~ at least one of said modules includes a MOSFET.

3. (previously presented) The hybrid switch as in claim 1, wherein at least one of said first module and said second module is chosen from the group consisting of IGBTs, IGCTs, thyristors, and diodes.

4. (canceled)

5. (original) The hybrid switch as in claim 1, wherein at least one of said first module and said second module is cryogenically cooled.

6. (currently amended) The hybrid switch as in ~~claim 4~~ claim 1, wherein said control circuit for switching said first module and said second module on and off is cryogenically cooled.

7.(original) The hybrid switch as in claim 1, wherein at least two said second modules used for conducting currents are connected in parallel.

8. (canceled)

9. (original) The hybrid switch as in claim 1, wherein at least two said first modules used for switching voltages and currents are connected in parallel.

10. (canceled )

11. (currently amended) The hybrid switch as in ~~claim 4~~ claim 1,wherein said control circuit activates the hybrid switch transition from said current off-state to said current on state by (a) turning said first module on while said second module is off, (b) turning said second module on to transfer current from said first module to said second module, (c) turning said first module off so that all current flows through said second module, thereby establishing the hybrid switch "current on state";
and wherein said control circuit in order to switch off said current through said second module, (d) turns on said first module transferring current from said second module to said first module, (e) turns said second module to said off state so as to divert said current to said first module, and then (f) turns said first module to its off state.

12. (original) The hybrid switch as in claim 2, wherein at least one of said first module and said second module is cryogenically cooled.

13. (previously presented) The hybrid switch as in claim 2, further comprising a control circuit for switching respectively said first module and said second module on and off, each module in a predetermined sequence and for predetermined intervals to reduce power losses in the conduction and switching operation of the hybrid switch.

14. (previously presented) The hybrid switch as in claim 13, wherein said control circuit activates the hybrid switch transition from said current off-state to said current on state by (a) turning said first module on while said second module is off, (b) turning said second module on to transfer current from said first module to said second module, (c) turning said first module off so that all current flows through said second module, thereby establishing the hybrid switch "current on state";
and wherein said control circuit in order to switch off said current through said second module, (d) turns on said first module transferring current from said second module to said first module, (e) turns said second module to said off state so as to divert said current to said first module, and then (f) turns said first module to its off state.

15.(original) The hybrid switch as in claim 14, wherein at least said second module is cryogenically cooled to reduce conduction losses.

16(original) The hybrid switch as in claim 5, further comprising a refrigeration unit cryogenically cooling said at least one module.

17(original) The hybrid switch as in claim 12, further comprising a refrigeration unit cryogenically cooling said at least one module.

18(original) The hybrid switch as in claim 16, wherein at least said second module is cryogenically cooled to reduce conduction losses.

19(original) The hybrid switch as in claim 14, wherein at least said first module is cryogenically cooled to reduce switching time.

20(original) The hybrid switch as in claim 16, wherein at least said first module is cryogenically cooled to reduce switching time.

21(original) The hybrid switch as in claim 7, wherein at least another two said second modules used for conducting currents are connected in series.

22. (new) A hybrid switch in a line, comprising:
a first switching module for switching voltages and switching currents and for incurring substantially all switching losses during the turn on transition from a current off state of said hybrid switch to a current on state and during the turn off transition from said on state to off state of said hybrid switch; and

at least two second switching modules in series for conducting current between switching transitions and for incurring substantially all conduction losses,

said first switching module and said in-series second switching modules being connected electrically in parallel, and said switching modules being respectively controllable to be in one of an open non-conducting off state and a closed conducting state, at least one said switching module having solid state construction.

23. (new) A hybrid switch in a line, comprising:
at least two first switching modules in series for switching voltages and switching currents and for incurring substantially all switching losses during the turn on transition from a current off state of said hybrid switch to a current on state and during the turn off transition from said on state to off state of said hybrid switch; and

a second switching module for conducting current between switching transitions and for incurring substantially all conduction losses,

said in-series first switching modules and said second switching module being connected electrically in parallel, and said switching modules being respectively controllable to be in one of an open non-conducting off state and a closed conducting state, at least one said switching module having solid state construction.